

Serial No. 10/714,773
Docket No. Elpida 03USFP934
Amendment B

REMARKS

Reconsideration of the rejection of claims 25-32 under 35 USC §103 (a) as being unpatentable over US Patent No. 6,348,301 to Lin in view of US Patent 6,238,830 to Rangarajan and US Patent No. 6,235,439 to Whiting is respectfully requested.

The primary reference Lin (US 6,348,301) teaches a production method which executes a first baking step and a second baking step after a patterning of photo resist for reducing an opening size in the photo resist. However, both the temperature of the first baking step and the temperature of the second baking step are fixed values which are preliminarily set. More particularly, as described in Column 3, Line 66 to Column 4, Line 6, the temperature of the first baking step is preliminarily set to a temperature greater than the melting point of the photo resist. The temperature of the second baking step is preliminarily set to a temperature in which dimensions of the photo resist are linearly changed with respect to heating time (to reach a temperature of the point B in Fig. 1). Then, these pre-set temperatures are not changed until the end of the production process. That is, Lin only discloses a production method in which the second baking step is performed at the preliminary determined second fixed temperature after the first baking step.

The present claimed invention is based, in part, on the technical requirement that the temperature of a second baking step is neither fixed nor set, but rather is set based on transition of a first temperature of the first baking step. Lin does not teach or suggest this technical requirement.

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Neither secondary reference supplies the missing teachings to Lin to achieve or render obvious Applicant's claimed invention. Whiting and Rangarajan merely disclose a method of controlling a temperature of a wafer when performing a baking at a specific temperature.

Rangarajan describes a measurement of fluorescence or excitation light and a measuring system thereof (see column 5 lines 30-64, column 6 lines 11-25). Rangarajan teaches identifying temperatures at various locations and determining if the temperature is within a threshold range (see column 8, lines 20-31) to maintain heating at one steady temperature. Applicant's claims require two heating steps at two different temperatures in which the second heating step is varied depending on temperature data collected during the first heating step. Thus, Rangarajan's temperature correction is not a "second treatment temperature" different from the first treatment temperature as required by Applicant's independent claims 25 and 32.

Whiting similarly does not teach performing a heat treatment at a second temperature different from the first heat treatment temperature or performing a heat treatment at the second temperature for a predetermined length of time. Whiting discloses a control loop to adjust individual heating zones of a hot plate. As in Rangarajan, to the extent that the Examiner is implying that Whiting's temperature correction is a "second treatment temperature" as presently claimed, the temperature correction cannot be performed for "a predetermined length of a second time period" because the time of correction is not foreseeable in Whiting. Thus, no combination of Lin, Rangarajan and Whiting could achieve or render obvious claims 25 and 32 or claims 26-31 and 33 which depend from independent claim 25, or independent claim 32, as the case may be.

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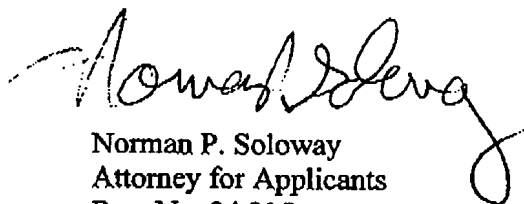
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Having dealt with all the objections raised by the Examiner, the Application is believed to be in order for allowance. Early and favorable action is respectfully requested.

The foregoing amendment makes no claim charges and thus should be entered as a matter of right.

In the event there are any fee deficiencies or additional fees are payable, please charge them (or credit any overpayment) to our Deposit Account Number 08-1391.

Respectfully submitted,

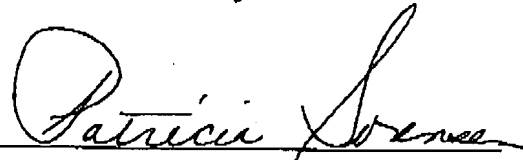


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